```
Trying 3106016892...Open

Welcome to STN International!  Enter x:x
LOGINID:SSSPTA1647PXH
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Dec 17   The CA Lexicon available in the CAPLUS and CA files
 NEWS  3  Feb 06   Engineering Information Encompass files have new names
 NEWS  4  Feb 16   TOXLINE no longer being updated
 NEWS  5  Apr 23   Search Derwent WPINDEX by chemical structure
 NEWS  6  Apr 23   PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
 NEWS  7  May 07   DGENE Reload
 NEWS  8  Jun 20   Published patent applications (A1) are now in USPATFULL
 NEWS  9  JUL 13   New SDI alert frequency now available in Derwent's
                   DWPI and DPCI
 NEWS 10  Aug 23   In-process records and more frequent updates now in
                   MEDLINE
 NEWS 11  Aug 23   PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
 NEWS 12  Aug 23   Adis Newsletters (ADISNEWS) now available on STN
 NEWS 13  Sep 17   IMSworld Pharmaceutical Company Directory name change
                   to PHARMASEARCH
 NEWS 14  Oct 09   Korean abstracts now included in Derwent World Patents
                   Index
 NEWS 15  Oct 09   Number of Derwent World Patents Index updates increased
 NEWS 16  Oct 15   Calculated properties now in the REGISTRY/ZREGISTRY File
 NEWS 17  Oct 22   Over 1 million reactions added to CASREACT
 NEWS 18  Oct 22   DGENE GETSIM has been improved
 NEWS 19  Oct 29   AAASD no longer available
 NEWS 20  Nov 19   New Search Capabilities  USPATFULL and USPAT2
 NEWS 21  Nov 19   TOXCENTER(SM) - new toxicology file now available on STN
 NEWS 22  Nov 29   COPPERLIT now available on STN
 NEWS 23  Nov 29   DWPI revisions to NTIS and US Provisional Numbers
 NEWS 24  Nov 30   Files VETU and VETB to have open access
 NEWS 25  Dec 10   WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
 NEWS 26  Dec 10   DGENE BLAST Homology Search
 NEWS 27  Dec 17   WELDASEARCH now available on STN
 NEWS 28  Dec 17   STANDARDS now available on STN
 NEWS 29  Dec 17   New fields for DPCI
 NEWS 30  Dec 19   CAS Roles modified
 NEWS 31  Dec 19   1907-1946 data and page images added to CA and CAplus

 NEWS EXPRESS  August 15 CURRENT WINDOWS VERSION IS V6.0c,
               CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP),
               AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *
```

FILE 'HOME' ENTERED AT 15:03:50 ON 20 DEC 2001

=> file biosis caplus medline
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.30	0.30

FILE 'BIOSIS' ENTERED AT 15:04:45 ON 20 DEC 2001
COPYRIGHT (C) 2001 BIOSIS(R)

FILE 'CAPLUS' ENTERED AT 15:04:45 ON 20 DEC 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 15:04:45 ON 20 DEC 2001

=> s type I collagen
L1 18343 TYPE I COLLAGEN

=> s type III collagen
L2 5055 TYPE III COLLAGEN

=> s l1 and l2
L3 2186 L1 AND L2

=> s nerve (w) regeneration
L4 15999 NERVE (W) REGENERATION

=> s l3 and l4
L5 3 L3 AND L4

=> d abs ibib l5 1-3

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2001 ACS
AB Extracellular matrix changes are thought to be essential to the regeneration of peripheral nerves. The prodn. of this matrix is believed to be regulated by interactions between axons and their supporting cells. In this study matrix prodn. and cell proliferation were studied during rat sciatic **nerve regeneration** after a crush injury, and compared to that after rat sciatic nerve transection. Expression of pro.alpha.1(I) and pro.alpha.1(III) collagen and laminin .beta.1 mRNAs was followed in isolated endoneuria by Northern and in situ hybridization both proximally and distally to the site of either a crush injury or transection of rat sciatic nerve up to 18 wk. Changes in the Schwann cell and fibroblast populations were monitored by morphometric anal. of endoneurial cross-sections immunostained for S-100 protein. The process of axonal regeneration was followed by Bielschowsky's silver staining. A crush injury initially resulted in increased expression of all mRNAs studied in the endoneurial cells. However, with progressing axonal regeneration the amt. of collagen mRNAs returned to control levels, whereas the amt. of laminin .beta.1 mRNA in the distal site of the crush remained elevated throughout the study period. The expression of **type I collagen** mRNA was enhanced after nerve transection injury compared to that after the crush injury. The epineurial fibroblasts actively expressed both type I and III collagen mRNAs after the injury. The proliferation of Schwann cells and the expression of collagen mRNAs are not, at least directly, related to the axonal regeneration. However, the long-lasting and strong expression of laminin .beta.1 mRNA after a nerve crush injury may be related to good axonal regeneration. The expression of **type I collagen** in the epineurium may lead to clin. well-recognized epineurial scarring and thus impede axonal regeneration.
ACCESSION NUMBER: 1998:634264 CAPLUS
DOCUMENT NUMBER: 130:36800
TITLE: Expression of type I and III collagen and laminin .beta.1 after rat sciatic nerve crush injury
AUTHOR(S): Siironen, Jari; Vuorio, Eero; Sandberg, Minna; Roytta, Matias

CORPORATE SOURCE: Department of Pathology, University of Turku, Turku, 20520, Finland
SOURCE: J. Peripher. Nerv. Syst. (1996), 1(3), 209-221
CODEN: JPNSFO; ISSN: 1085-9489
PUBLISHER: Woodland Publications
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 76
REFERENCE(S): (1) Baichwal, R; Biochem Biophys Res Commun 1989, V164, P883 CAPLUS
(2) Baichwal, R; Proc Natl Acad Sci USA 1988, V85, P1701 CAPLUS
(3) Barlow, D; EMBO J 1984, V3, P2355 CAPLUS
(6) Bignami, A; J Neuropathol Exp Neurol 1984, V43, P94 CAPLUS
(9) Burgeson, R; Matrix Biology 1994, V14, P209 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2001 ACS
AB Extracellular matrix (ECM) protein deposition is an important feature of leprous nerves, where Schwann cells (SCs) and macrophages are the main hosts for Mycobacterium leprae. Since, SCs are involved in the synthesis of ECM proteins and its prodn. is regulated by macrophage secretory factors, the present study aimed to det. in vitro, the effect of M. leprae infection and macrophage secretory products on secretion of ECM proteins by SCs in two strains of mice, Swiss White (SW) and C57BL/6, that are known to differ in their nerve pathol. and macrophage functions in response to infection. Following six days of M. leprae infection, SCs from SW mice responded with increased secretion of 14C-leucine radiolabeled proteins and a concomitant increase in laminin and collagens type I, III and IV, as detd. by ELISA. In contrast infected C57BL/6 SCs responded with decreased secretion of total proteins and fibronectin. Exposure of SCs to macrophage conditioned medium resulted in decreased ECM protein secretion in both strains of mice. This decrease was a function of protein breakdown by macrophage derived proteases and also active regulation by macrophage secreted cytokines. A similar effect of M. leprae and macrophage secretory products on SC metab. in leprous nerves would have major ramifications on damage and repair activities. In addn. ECM proteins would also influence the compn. of the infiltrating cell population in lepromatous and tuberculoid nerves.
ACCESSION NUMBER: 1997:633122 CAPLUS
DOCUMENT NUMBER: 127:317607
TITLE: Schwann cell extracellular matrix protein production is modulated by Mycobacterium leprae and macrophage secretory products
AUTHOR(S): Singh, Neeta; Birdi, Tannaz J.; Chandrashekar, Sushila; Antia, Noshir H.
CORPORATE SOURCE: The Foundation for Medical Research, 84-A, R.G. Thadani Marg, Worli, Bombay, 400 018, India
SOURCE: J. Neurol. Sci. (1997), 151(1), 13-22
CODEN: JNSCAG; ISSN: 0022-510X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

L5 ANSWER 3 OF 3 MEDLINE
AB During the first 2 weeks after an injury to peripheral nerve, endoneurial cells proliferate and express integrin beta 1 and mRNA for collagen types I and III. Clinical results for surgical repair within this time are clearly better than those obtained after delayed (months after original injury) surgery. The question of whether this is due to changes in the proliferative capacity of endoneurial cells or to changes in expression of mRNA for collagen types I and III or integrin beta 1 was studied using rats. The left common peroneal nerve was transected and allowed to degenerate for 3 and 6 months. After these times, the tibial nerve of the same animals were transected, and the fresh proximal stump of the transected tibial nerve was sutured into the chronically denervated distal stump of the common peroneal nerve. At 3 and 6 weeks after the reoperation, samples were collected from the distal stump for morphometry,

immunohistochemistry and in situ hybridization. Proliferating cells and Schwann cells were identified by immunohistochemistry. These cells increased markedly in number during the axonal reinnervation. In situ hybridization revealed that in the epineurium and perineurium, which were fibrotic, especially type I but also **type III collagen** mRNA were highly expressed. The amount of **type I collagen** mRNA in the endoneurium seemed to increase with progressing axonal reinnervation. Immunostaining for integrin beta 1 was negative in these distal stumps. In the present study the proliferation of endoneurial cells and expression of **type I collagen** mRNA in the endoneurium were similar to those found after immediate regeneration of transected peripheral nerve.(ABSTRACT TRUNCATED AT 250 WORDS)

ACCESSION NUMBER: 95274358 MEDLINE
DOCUMENT NUMBER: 95274358 PubMed ID: 7538721
TITLE: Axonal regeneration into chronically denervated distal stump. 2. Active expression of **type I collagen** mRNA in epineurium.
AUTHOR: Siironen J; Vuorinen V; Taskinen H S; Roytta M
CORPORATE SOURCE: Department of Pathology, University of Turku, Finland.
SOURCE: ACTA NEUROPATHOLOGICA, (1995) 89 (3) 219-26.
Journal code: 1CE; 0412041. ISSN: 0001-6322.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199506
ENTRY DATE: Entered STN: 19950629
Last Updated on STN: 19960129
Entered Medline: 19950620

=> d his

(FILE 'HOME' ENTERED AT 15:03:50 ON 20 DEC 2001)

FILE 'BIOSIS, CAPLUS, MEDLINE' ENTERED AT 15:04:45 ON 20 DEC 2001
L1 18343 S TYPE I COLLAGEN
L2 5055 S TYPE III COLLAGEN
L3 2186 S L1 AND L2
L4 15999 S NERVE (W) REGENERATION
L5 3 S L3 AND L4

```
Trying 3106016892...Open

Welcome to STN International!  Enter x:x
LOGINID:SSSPTA1647PXH
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Dec 17   The CA Lexicon available in the CAPLUS and CA files
 NEWS  3  Feb 06   Engineering Information Encompass files have new names
 NEWS  4  Feb 16   TOXLINE no longer being updated
 NEWS  5  Apr 23   Search Derwent WPINDEX by chemical structure
 NEWS  6  Apr 23   PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
 NEWS  7  May 07   DGENE Reload
 NEWS  8  Jun 20   Published patent applications (A1) are now in USPATFULL
 NEWS  9  JUL 13   New SDI alert frequency now available in Derwent's
                   DWPI and DPCI
 NEWS 10  Aug 23   In-process records and more frequent updates now in
                   MEDLINE
 NEWS 11  Aug 23   PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
 NEWS 12  Aug 23   Adis Newsletters (ADISNEWS) now available on STN
 NEWS 13  Sep 17   IMSworld Pharmaceutical Company Directory name change
                   to PHARMASEARCH
 NEWS 14  Oct 09   Korean abstracts now included in Derwent World Patents
                   Index
 NEWS 15  Oct 09   Number of Derwent World Patents Index updates increased
 NEWS 16  Oct 15   Calculated properties now in the REGISTRY/ZREGISTRY File
 NEWS 17  Oct 22   Over 1 million reactions added to CASREACT
 NEWS 18  Oct 22   DGENE GETSIM has been improved
 NEWS 19  Oct 29   AAASD no longer available
 NEWS 20  Nov 19   New Search Capabilities  USPATFULL and USPAT2
 NEWS 21  Nov 19   TOXCENTER(SM) - new toxicology file now available on STN
 NEWS 22  Nov 29   COPPERLIT now available on STN
 NEWS 23  Nov 29   DWPI revisions to NTIS and US Provisional Numbers
 NEWS 24  Nov 30   Files VETU and VETB to have open access
 NEWS 25  Dec 10   WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
 NEWS 26  Dec 10   DGENE BLAST Homology Search
 NEWS 27  Dec 17   WELDASEARCH now available on STN
 NEWS 28  Dec 17   STANDARDS now available on STN
 NEWS 29  Dec 17   New fields for DPCI
 NEWS 30  Dec 19   CAS Roles modified
 NEWS 31  Dec 19   1907-1946 data and page images added to CA and CAplus

 NEWS EXPRESS  August 15 CURRENT WINDOWS VERSION IS V6.0c,
               CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP),
               AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *
```

FILE 'HOME' ENTERED AT 15:03:50 ON 20 DEC 2001

=> file biosis caplus medline
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.30	0.30

FILE 'BIOSIS' ENTERED AT 15:04:45 ON 20 DEC 2001
COPYRIGHT (C) 2001 BIOSIS(R)

FILE 'CAPLUS' ENTERED AT 15:04:45 ON 20 DEC 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 15:04:45 ON 20 DEC 2001

=> s type I collagen
L1 18343 TYPE I COLLAGEN

=> s type III collagen
L2 5055 TYPE III COLLAGEN

=> s l1 and l2
L3 2186 L1 AND L2

=> s nerve (w) regeneration
L4 15999 NERVE (W) REGENERATION

=> s l3 and l4
L5 3 L3 AND L4

=> d abs ibib l5 1-3

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2001 ACS
AB Extracellular matrix changes are thought to be essential to the regeneration of peripheral nerves. The prodn. of this matrix is believed to be regulated by interactions between axons and their supporting cells. In this study matrix prodn. and cell proliferation were studied during rat sciatic **nerve regeneration** after a crush injury, and compared to that after rat sciatic nerve transection. Expression of pro.alpha.1(I) and pro.alpha.1(III) collagen and laminin .beta.1 mRNAs was followed in isolated endoneuria by Northern and in situ hybridization both proximally and distally to the site of either a crush injury or transection of rat sciatic nerve up to 18 wk. Changes in the Schwann cell and fibroblast populations were monitored by morphometric anal. of endoneurial cross-sections immunostained for S-100 protein. The process of axonal regeneration was followed by Bielschowsky's silver staining. A crush injury initially resulted in increased expression of all mRNAs studied in the endoneurial cells. However, with progressing axonal regeneration the amt. of collagen mRNAs returned to control levels, whereas the amt. of laminin .beta.1 mRNA in the distal site of the crush remained elevated throughout the study period. The expression of **type I collagen** mRNA was enhanced after nerve transection injury compared to that after the crush injury. The epineurial fibroblasts actively expressed both type I and III collagen mRNAs after the injury. The proliferation of Schwann cells and the expression of collagen mRNAs are not, at least directly, related to the axonal regeneration. However, the long-lasting and strong expression of laminin .beta.1 mRNA after a nerve crush injury may be related to good axonal regeneration. The expression of **type I collagen** in the epineurium may lead to clin. well-recognized epineurial scarring and thus impede axonal regeneration.
ACCESSION NUMBER: 1998:634264 CAPLUS
DOCUMENT NUMBER: 130:36800
TITLE: Expression of type I and III collagen and laminin .beta.1 after rat sciatic nerve crush injury
AUTHOR(S): Siironen, Jari; Vuorio, Eero; Sandberg, Minna; Roytta, Matias

CORPORATE SOURCE: Department of Pathology, University of Turku, Turku, 20520, Finland
SOURCE: J. Peripher. Nerv. Syst. (1996), 1(3), 209-221
CODEN: JPNSFO; ISSN: 1085-9489
PUBLISHER: Woodland Publications
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 76
REFERENCE(S): (1) Baichwal, R; Biochem Biophys Res Commun 1989, V164, P883 CAPLUS
(2) Baichwal, R; Proc Natl Acad Sci USA 1988, V85, P1701 CAPLUS
(3) Barlow, D; EMBO J 1984, V3, P2355 CAPLUS
(6) Bignami, A; J Neuropathol Exp Neurol 1984, V43, P94 CAPLUS
(9) Burgeson, R; Matrix Biology 1994, V14, P209 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2001 ACS
AB Extracellular matrix (ECM) protein deposition is an important feature of leprous nerves, where Schwann cells (SCs) and macrophages are the main hosts for Mycobacterium leprae. Since, SCs are involved in the synthesis of ECM proteins and its prodn. is regulated by macrophage secretory factors, the present study aimed to det. in vitro, the effect of M. leprae infection and macrophage secretory products on secretion of ECM proteins by SCs in two strains of mice, Swiss White (SW) and C57BL/6, that are known to differ in their nerve pathol. and macrophage functions in response to infection. Following six days of M. leprae infection, SCs from SW mice responded with increased secretion of 14C-leucine radiolabeled proteins and a concomitant increase in laminin and collagens type I, III and IV, as detd. by ELISA. In contrast infected C57BL/6 SCs responded with decreased secretion of total proteins and fibronectin. Exposure of SCs to macrophage conditioned medium resulted in decreased ECM protein secretion in both strains of mice. This decrease was a function of protein breakdown by macrophage derived proteases and also active regulation by macrophage secreted cytokines. A similar effect of M. leprae and macrophage secretory products on SC metab. in leprous nerves would have major ramifications on damage and repair activities. In addn. ECM proteins would also influence the compn. of the infiltrating cell population in lepromatous and tuberculoid nerves.
ACCESSION NUMBER: 1997:633122 CAPLUS
DOCUMENT NUMBER: 127:317607
TITLE: Schwann cell extracellular matrix protein production is modulated by Mycobacterium leprae and macrophage secretory products
AUTHOR(S): Singh, Neeta; Birdi, Tannaz J.; Chandrashekar, Sushila; Antia, Noshir H.
CORPORATE SOURCE: The Foundation for Medical Research, 84-A, R.G. Thadani Marg, Worli, Bombay, 400 018, India
SOURCE: J. Neurol. Sci. (1997), 151(1), 13-22
CODEN: JNSCAG; ISSN: 0022-510X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

L5 ANSWER 3 OF 3 MEDLINE
AB During the first 2 weeks after an injury to peripheral nerve, endoneurial cells proliferate and express integrin beta 1 and mRNA for collagen types I and III. Clinical results for surgical repair within this time are clearly better than those obtained after delayed (months after original injury) surgery. The question of whether this is due to changes in the proliferative capacity of endoneurial cells or to changes in expression of mRNA for collagen types I and III or integrin beta 1 was studied using rats. The left common peroneal nerve was transected and allowed to degenerate for 3 and 6 months. After these times, the tibial nerve of the same animals were transected, and the fresh proximal stump of the transected tibial nerve was sutured into the chronically denervated distal stump of the common peroneal nerve. At 3 and 6 weeks after the reoperation, samples were collected from the distal stump for morphometry,

immunohistochemistry and in situ hybridization. Proliferating cells and Schwann cells were identified by immunohistochemistry. These cells increased markedly in number during the axonal reinnervation. In situ hybridization revealed that in the epineurium and perineurium, which were fibrotic, especially type I but also **type III collagen** mRNA were highly expressed. The amount of **type I collagen** mRNA in the endoneurium seemed to increase with progressing axonal reinnervation. Immunostaining for integrin beta 1 was negative in these distal stumps. In the present study the proliferation of endoneurial cells and expression of **type I collagen** mRNA in the endoneurium were similar to those found after immediate regeneration of transected peripheral nerve.(ABSTRACT TRUNCATED AT 250 WORDS)

ACCESSION NUMBER: 95274358 MEDLINE
DOCUMENT NUMBER: 95274358 PubMed ID: 7538721
TITLE: Axonal regeneration into chronically denervated distal stump. 2. Active expression of **type I collagen** mRNA in epineurium.
AUTHOR: Siironen J; Vuorinen V; Taskinen H S; Roytta M
CORPORATE SOURCE: Department of Pathology, University of Turku, Finland.
SOURCE: ACTA NEUROPATHOLOGICA, (1995) 89 (3) 219-26.
Journal code: 1CE; 0412041. ISSN: 0001-6322.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199506
ENTRY DATE: Entered STN: 19950629
Last Updated on STN: 19960129
Entered Medline: 19950620

=> d his

(FILE 'HOME' ENTERED AT 15:03:50 ON 20 DEC 2001)

FILE 'BIOSIS, CAPLUS, MEDLINE' ENTERED AT 15:04:45 ON 20 DEC 2001
L1 18343 S TYPE I COLLAGEN
L2 5055 S TYPE III COLLAGEN
L3 2186 S L1 AND L2
L4 15999 S NERVE (W) REGENERATION
L5 3 S L3 AND L4

=> s 5% (w) type III (w) collagen
L6 7 5% (W) TYPE III (W) COLLAGEN

=> d ibib abs l6 1-7

L6 ANSWER 1 OF 7 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1994:386294 BIOSIS
DOCUMENT NUMBER: PREV199497399294
TITLE: Tendon degeneration and chronic shoulder pain: Changes in the collagen composition of the human rotator cuff tendons in rotator cuff tendinitis.
AUTHOR(S): Riley, G. P. (1); Harrall, R. L.; Constant, C. R.; Chard, M. D.; Cawston, T. E.; Hazleman, B. L.
CORPORATE SOURCE: (1) Rheumatol. Res., Unit, Box 194, Addenbrooke's Hosp., Hills Rd., Cambridge CB2 2QQ UK
SOURCE: Annals of the Rheumatic Diseases, (1994) Vol. 53, No. 6, pp. 359-366.
ISSN: 0003-4967.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Objectives-To analyse the collagen composition of normal adult human supraspinatus tendon and to compare with: (1) a flexor tendon (the common biceps tendon) which is rarely involved in any degenerative pathology; (2) degenerate tendons from patients with chronic rotator cuff tendinitis. Methods-Total collagen content, collagen solubility and collagen type were investigated by hydroxyproline analysis, acetic acid and pepsin digestion,

cyanogen bromide peptide analysis, SDS-PAGE and Western blotting. Results-The collagen content of the normal cadaver supraspinatus tendons (n=60) was 96.3 mu-g HYPRO/mg dry weight (range 79.3-113.3) and there was no significant change across the age range 11 to 95 years. There was no significant difference from the common biceps tendon (93.3 (13.5) mu-g HYPRO/mg dry weight, n = 24). Although extremely insoluble in both acetic acid and pepsin, much of the collagen was soluble after cyanogen bromide digestion (mean 47.9% (29.8)). Seventeen per cent (10/60) of the 'normal' cadaver supraspinatus tendon sample contained more than **5% type III collagen**, although none of the common biceps tendons had significant amounts. Degenerate supraspinatus and subscapularis tendons had a reduced collagen content (83.8 (13.9) mu-g/mg dry weight and 76.9 (16.8) mu-g/mg dry wt respectively) and were more soluble in acetic acid, pepsin and cyanogen bromide (p lt 0.001). Eighty two per cent (14/17) of supraspinatus tendons and 100% (8/8) of subscapularis tendons from patients with tendinitis contained more than **5% type III collagen**. Conclusions-The changes in collagen composition in rotator cuff tendinitis are consistent with new matrix synthesis, tissue remodelling and wound healing, in an attempt to repair the tendon defect, even in old and degenerate tendons. An increase in type III collagen in some 'normal' cadaver supraspinatus tendons is evidence that changes in collagen synthesis and turnover may precede tendon rupture. These changes may be the result of repeated minor injury and microscopic fibre damage or a consequence of local factors such as reduced vascular perfusion, tissue hypoxia, altered mechanical forces and the influence of cytokines. These collagenous changes may accumulate with age and substantially weaken the tendon structure, predisposing the tendon to rotator cuff tendinitis and eventual tendon rupture.

L6 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:676643 CAPLUS
DOCUMENT NUMBER: 135:216051
TITLE: Protein-based endovascular graft coatings
INVENTOR(S): Williams, Stuart K.; Clapper, David L.
PATENT ASSIGNEE(S): Surmodics, Inc., USA; The Arizona Board of Regents on behalf of the University of Arizona
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001066161	A1	20010913	WO 2001-US40255	20010306

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-519246 A 20000306
AB An endovascular graft, e.g., having both an expandable stent portion and a stent cover portion positioned within and/or surrounding the expandable portion, the graft itself and/or a stent cover portion being coated with a bioactive agent adapted to promote initial thrombus formation, preferably followed by long term fibrous tissue in growth. The endovascular graft addresses concerns regarding endoleaking by permitting the graft to be deployed and used in a manner that promotes a short term hemostatic effect in the perigraft region. This short term effect can, in turn, be used to promote or permit long term fibrous tissue ingrowth. Particularly where the stent cover portion is prepd. from a porous material selected from PET and ePTFE, the bioactive agent can include a thrombogenic agent such as

collagen covalently attached in the form of a thin, conformal coating on at least the outer surface of the stent cover. An optimal coating of this type is formed by the activation of photoreactive groups provided by either the cover material itself, by the bioactive agent itself, and/or by a linking agent. For example, an endovascular graft was coated by immobilizing bovine skin collagen comprising 95% type I collagen and **5% type III collagen** photoderivatized by the addn. of benzoylbenzoic acid-.epsilon.-aminocaproic acid-N-oxysuccinimide. The amt. of immobilized photoderivatized collagen was 1.8 .mu./cm2 of endovascular graft. Two collagen-immobilized grafts and two non-coated grafts were implanted in dogs; no evidence of endoleaking was obsd. in dogs implanted with coated grafts, but endoleaking was detected in uncoated grafts. A cellular lining (neointima) was evident in all samples; however, the thickness of the neointima was not sufficient to decrease the luminal diam. No thrombus formation was obsd.

REFERENCE COUNT: 4

REFERENCE(S):
(1) Asako, S; US 4822361 A 1989
(2) Clapper, D; US 5744515 A 1998 CAPLUS
(3) Hammar, W; US 4326532 A 1982 CAPLUS
(4) Medtronic Inc; EP 0608095 A 1994 CAPLUS

L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:576796 CAPLUS
DOCUMENT NUMBER: 121:176796

TITLE: Tendon degeneration and chronic shoulder pain: changes in the collagen composition of the human rotator cuff tendons in rotator cuff tendinitis

AUTHOR(S): Riley, G P.; Harrall, R L.; Constant, C R.; Chard, M D.; Cawston, T E.; Hazleman, B L.
CORPORATE SOURCE: Rheumatology Research Unit, Addenbrooke's Hospital, Cambridge, CB2 2QQ, UK

SOURCE: Ann. Rheum. Dis. (1994), 53(6), 359-66
CODEN: ARDIAO; ISSN: 0003-4967
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To analyze the collagen compn. of normal adult human supraspinatus tendon and to compare with: (1) a flexor tendon (the common biceps tendon) which is rarely involved in any degenerative pathol.; (2) degenerate tendons from patients with chronic rotator cuff tendinitis. Total collagen content, collagen soly. and collagen type were investigated by hydroxyproline anal., acetic acid and pepsin digestion, cyanogen bromide peptide anal., SDS-PAGE and Western blotting. The collagen content of the normal cadaver supraspinatus tendons (n = 60) was 96.cntdot.3 .mu.g HYPRO/mg dry wt. (range 79.cntdot.3-113.cntdot.3) and there was no significant change across the age range 11 to 95 yr. There was no significant difference from the common biceps tendon [93.cntdot.3 (13.cntdot.5) .mu.g HYPRO/mg dry wt., n = 24]. Although extremely insol. in both acetic acid and pepsin, much of the collagen was sol. after cyanogen bromide digestion [mean 47.cntdot.9% (29.cntdot.8)]. Seventeen per cent (10/60) of the 'normal' cadaver supraspinatus tendon sample contained more than **5% type III collagen**, although none of the common biceps tendons had significant amts. Degenerate supraspinatus and subscapularis tendons had a reduced collagen content [83.cntdot.8 (13.cntdot.9) .mu.g/mg dry wt. and 76.cntdot.9 (16.cntdot.8) .mu.g/mg dry wt resp.] and were more sol. in acetic acid, pepsin and cyanogen bromide ($p < 0.cntdot.001$). Eighty two per cent (14/17) of supraspinatus tendons and 100% (8/8) of subscapularis tendons from patients with tendinitis contained more than **5% type III collagen**. The changes in collagen compn. in rotator cuff tendinitis are consistent with new matrix synthesis, tissue remodelling and wound healing, in an attempt to repair the tendon defect, even in old and degenerate tendons. An increase in type III collagen in some 'normal' cadaver supraspinatus tendons is evidence that changes in collagen synthesis and turnover may precede tendon rupture. These changes may be the result of repeated minor injury and microscopic fiber damage or a consequence of local factors such as reduced vascular perfusion, tissue hypoxia, altered mech. forces and the influence of cytokines. These collagenous changes may accumulate with age

and substantially weaken the tendon structure, predisposing the tendon to rotator cuff tendinitis and eventual tendon rupture.

L6 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1990:176323 CAPLUS
DOCUMENT NUMBER: 112:176323
TITLE: Changes in the composition and metabolism of arterial collagens during the development of pulmonary hypertension in rabbits
AUTHOR(S): Bishop, Jill E.; Guerreiro, Dino; Laurent, Geoffrey J.
CORPORATE SOURCE: Natl. Heart Lung Inst., Univ. London, London, UK
SOURCE: Am. Rev. Respir. Dis. (1990), 141(2), 450-5
CODEN: ARDSBL; ISSN: 0003-0805
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Increased pulmonary artery pressure enhances collagen deposition in the pulmonary artery. Changes in collagen metab. may cause this deposition in the pulmonary artery of animals with pulmonary hypertension induced by bleomycin. Rabbits were injected intratracheally with bleomycin sulfate and after 14 days with L-[U-14C]proline plus unlabeled proline. Uptake into arterial collagens and release of labeled hydroxyproline were then measured after 2.5 h. The relative amts. of types I and III collagens were assessed from the levels of cyanogen bromide-derived peptides .alpha.1(I)CB8 and .alpha.1(III)CB5, resp., after SDS-PAGE. Collagen synthesis rates of about 3%/day were found in the control pulmonary artery and aorta, and about one-half of the newly synthesized collagen was degraded rapidly. At 14 days after bleomycin, there was a 5 fold increase in collagen synthesis rate and a marked decrease in the percentage of newly synthesized collagen degraded rapidly. There was no change in collagen metab. in the aorta of these animals. Pulmonary artery collagen from control rabbits consisted of 26.5% **type III collagen**. There was no change in compn. in bleomycin-treated animals. This study demonstrates quite rapid turnover rates for collagen in normal blood vessels. Remodeling of arterial connective tissue matrix during pulmonary hypertension involves marked but commensurate increases in type I and III collagens brought about by changes in both synthesis and degradative processes.

L6 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1990:96356 CAPLUS
DOCUMENT NUMBER: 112:96356
TITLE: Collagen synthesis by cultured rabbit aortic smooth-muscle cells. Alteration with phenotype
AUTHOR(S): Ang, Aik H.; Tachas, George; Campbell, Julie H.; Bateman, John F.; Campbell, Gordon R.
CORPORATE SOURCE: Dep. Anat., Univ. Melbourne, Parkville, 3052, Australia
SOURCE: Biochem. J. (1990), 265(2), 461-9
CODEN: BIJOAK; ISSN: 0306-3275
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Enzymically isolated rabbit aortic smooth muscle cells (SMC) in the 1st few days of primary culture express a contractile phenotype, but with time these cells modulate to a synthetic phenotype. Synthetic-state SMC are able to proliferate, and, provided that they undergo <5 cumulative population doublings, return to the contractile phenotype after reaching confluency (Campbell, J. H., et at., 1989). The present study detd. the synthesis of collagen, at the protein and mRNA levels, by cultured SMC as they undergo a change in phenotypic state. Upon modulating to the synthetic phenotype, SMC synthesized 25-30-fold more collagen than did contractile cells. At the same time, noncollagen-protein synthesis increased only 5-6-fold, indicating a specific stimulation of collagen synthesis. Steady-state mRNA levels are also elevated, with .alpha.2(I) and .alpha.1(III) mRNA levels 30- and 20-fold higher, resp., probably reflecting increased transcriptional activity. Phenotypic modulation was also assocd. with an alteration in the relative proportions of type I and III collagens synthesized, contractile SMC synthesizing 78.1% type I collagen and 17.5% **type III collagen**, and synthetic cells synthesizing 90.3% type I collagen and 5.8% type III

collagen. Enrichment of type I collagen was similarly noted at the mRNA level. On return to the contractile state, at confluency, collagen prodn. and the percentage of type I collagen decreased. This further illustrates the close assocn. between the phenotypic state of SMC and their collagen-biosynthetic phenotype.

L6 ANSWER 6 OF 7 MEDLINE
ACCESSION NUMBER: 94311640 MEDLINE
DOCUMENT NUMBER: 94311640 PubMed ID: 8037494
TITLE: Tendon degeneration and chronic shoulder pain: changes in the collagen composition of the human rotator cuff tendons in rotator cuff tendinitis.
AUTHOR: Riley G P; Harrall R L; Constant C R; Chard M D; Cawston T E; Hazleman B L
CORPORATE SOURCE: Rheumatology Research Unit, Addenbrooke's Hospital, Cambridge, United Kingdom.
SOURCE: ANNALS OF THE RHEUMATIC DISEASES, (1994 Jun) 53 (6) 359-66. Journal code: 62W; 0372355. ISSN: 0003-4967.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199408
ENTRY DATE: Entered STN: 19940825
Last Updated on STN: 19940825
Entered Medline: 19940818
AB OBJECTIVES--To analyse the collagen composition of normal adult human supraspinatus tendon and to compare with: (1) a flexor tendon (the common biceps tendon) which is rarely involved in any degenerative pathology; (2) degenerate tendons from patients with chronic rotator cuff tendinitis. METHODS--Total collagen content, collagen solubility and collagen type were investigated by hydroxyproline analysis, acetic acid and pepsin digestion, cyanogen bromide peptide analysis, SDS-PAGE and Western blotting. RESULTS--The collagen content of the normal cadaver supraspinatus tendons (n = 60) was 96.3 micrograms HYPRO/mg dry weight (range 79.3-113.3) and there was no significant change across the age range 11 to 95 years. There was no significant difference from the common biceps tendon [93.3 (13.5) micrograms HYPRO/mg dry weight, n = 24]. Although extremely insoluble in both acetic acid and pepsin, much of the collagen was soluble after cyanogen bromide digestion [mean 47.9% (29.8)]. Seventeen per cent (10/60) of the 'normal' cadaver supraspinatus tendon sample contained more than **5% type III collagen**, although none of the common biceps tendons had significant amounts. Degenerate supraspinatus and subscapularis tendons had a reduced collagen content [83.8 (13.9) micrograms/mg dry weight and 76.9 (16.8) micrograms/mg dry wt respectively) and were more soluble in acetic acid, pepsin and cyanogen bromide ($p < 0.001$). Eighty two per cent (14/17) of supraspinatus tendons and 100% (8/8) of subscapularis tendons from patients with tendinitis contained more than **5% type III collagen**. CONCLUSIONS--The changes in collagen composition in rotator cuff tendinitis are consistent with new matrix synthesis, tissue remodelling and wound healing, in an attempt to repair the tendon defect, even in old and degenerate tendons. An increase in type III collagen in some 'normal' cadaver supraspinatus tendons is evidence that changes in collagen synthesis and turnover may precede tendon rupture. These changes may be the result of repeated minor injury and microscopic fibre damage or a consequence of local factors such as reduced vascular perfusion, tissue hypoxia, altered mechanical forces and the influence of cytokines. These collagenous changes may accumulate with age and substantially weaken the tendon structure, predisposing the tendon to rotator cuff tendinitis and eventual tendon rupture.

L6 ANSWER 7 OF 7 MEDLINE
ACCESSION NUMBER: 90209987 MEDLINE
DOCUMENT NUMBER: 90209987 PubMed ID: 2321591
TITLE: Type IV Ehlers-Danlos syndrome presenting as sudden infant death.
AUTHOR: Byard R W; Keeley F W; Smith C R
CORPORATE SOURCE: Department of Pathology and Research Institute, Hospital

for Sick Children, Toronto, Ontario, Canada.
SOURCE: AMERICAN JOURNAL OF CLINICAL PATHOLOGY, (1990 Apr) 93 (4) 579-82.
Journal code: 3FK; 0370470. ISSN: 0002-9173.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199004
ENTRY DATE: Entered STN: 19900601
Last Updated on STN: 19900601
Entered Medline: 19900430

AB A previously healthy 5-month-old female infant presented with sudden death due to spontaneous subarachnoid hemorrhage associated with minor multifocal visceral hemorrhages. The clinical diagnosis had been sudden infant death syndrome. Although the family history was noncontributory and other features of type IV Ehlers-Danlos syndrome (EDS) were absent, the pattern of hemorrhage was consistent with this type of connective tissue disorder. The diagnosis was confirmed after postmortem analysis of skin and aorta showed less than **5% type III collagen** (normal greater than 15%). Extensive literature review failed to find any other reported cases of sudden death in infancy due to intracranial hemorrhage in patients with previously unsuspected type IV EDS. The authors suggest that collagen analysis should be performed in cases of unexplained multifocal spontaneous hemorrhage in infancy so that this rare diagnosis will not be missed.

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	46.80	47.10

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.53	-3.53

FILE 'STNGUIDE' ENTERED AT 15:21:06 ON 20 DEC 2001
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 14, 2001 (20011214/UP).

=> dis his

(FILE 'HOME' ENTERED AT 15:03:50 ON 20 DEC 2001)

FILE 'BIOSIS, CAPLUS, MEDLINE' ENTERED AT 15:04:45 ON 20 DEC 2001
L1 18343 S TYPE I COLLAGEN
L2 5055 S TYPE III COLLAGEN
L3 2186 S L1 AND L2
L4 15999 S NERVE (W) REGENERATION
L5 3 S L3 AND L4
L6 7 S 5% (W) TYPE III (W) COLLAGEN

FILE 'STNGUIDE' ENTERED AT 15:21:06 ON 20 DEC 2001

=> s 10% (w) type III (w) collagen
58 10%
(10)
183 TYPE
22 TYPES
183 TYPE
(TYPE OR TYPES)
3 III
0 TYPE III
(TYPE(W)III)

```
             0 COLLAGEN
L7           0 10% (W) TYPE III (W) COLLAGEN

=> d his

     (FILE 'HOME' ENTERED AT 15:03:50 ON 20 DEC 2001)

     FILE 'BIOSIS, CAPLUS, MEDLINE' ENTERED AT 15:04:45 ON 20 DEC 2001
L1         18343 S TYPE I COLLAGEN
L2          5055 S TYPE III COLLAGEN
L3          2186 S L1 AND L2
L4         15999 S NERVE (W) REGENERATION
L5             3 S L3 AND L4
L6             7 S 5% (W) TYPE III (W) COLLAGEN

     FILE 'STNGUIDE' ENTERED AT 15:21:06 ON 20 DEC 2001
L7             0 S 10% (W) TYPE III (W) COLLAGEN

=> s type IV collagen
           183 TYPE
            22 TYPES
           183 TYPE
                 (TYPE OR TYPES)
             2 IV
             0 COLLAGEN
L8           0 TYPE IV COLLAGEN
                 (TYPE(W)IV(W)COLLAGEN)

=> s Type IV (w)  collagen
           183 TYPE
            22 TYPES
           183 TYPE
                 (TYPE OR TYPES)
             2 IV
             0 TYPE IV
                 (TYPE(W)IV)
             0 COLLAGEN
L9           0 TYPE IV (W)  COLLAGEN
```